Technical Management Team 2006 Year End Review

Runoff and Operations

Cathy Hlebechuk

December 13, 2006

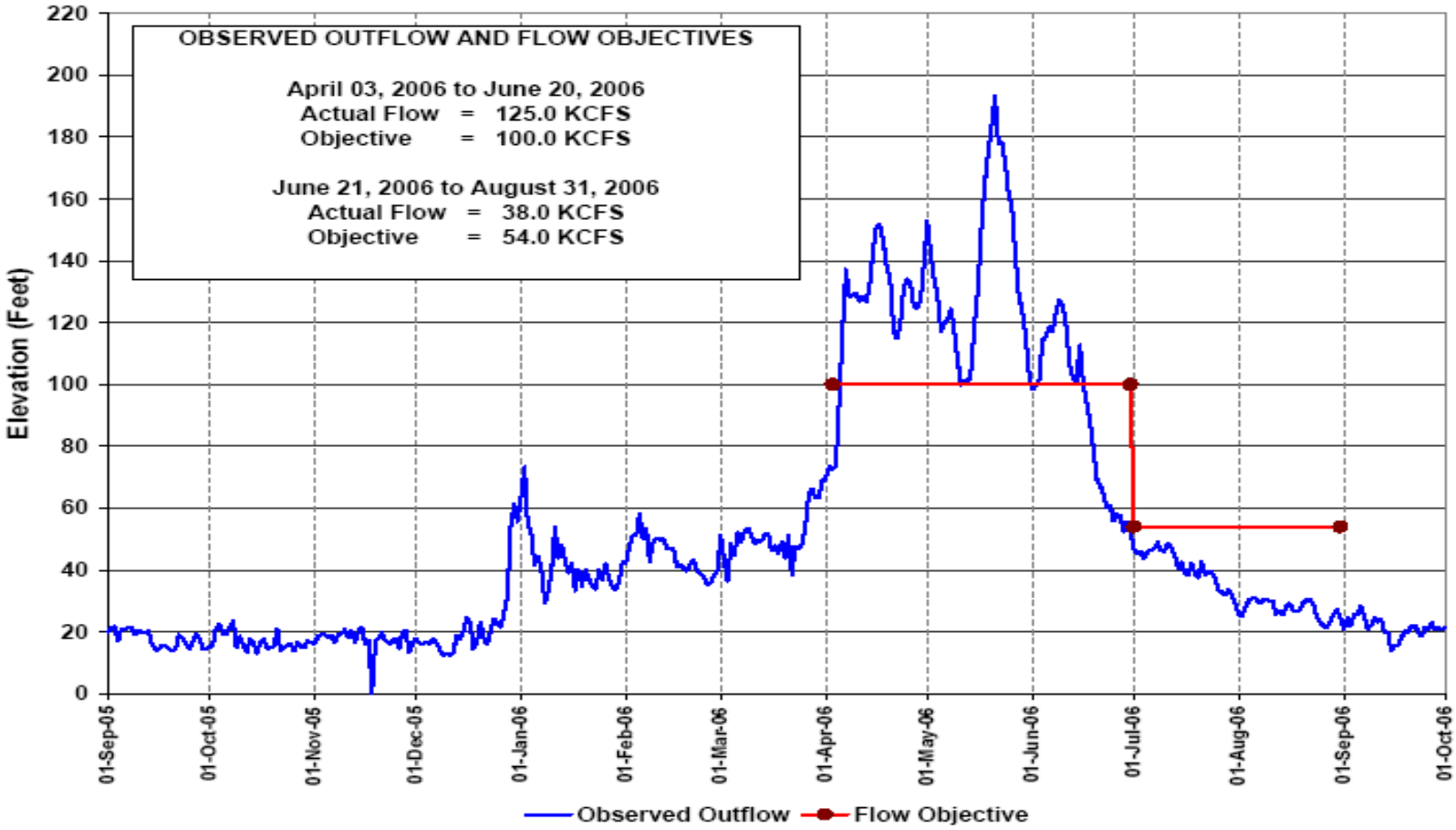
Runoff Volumes

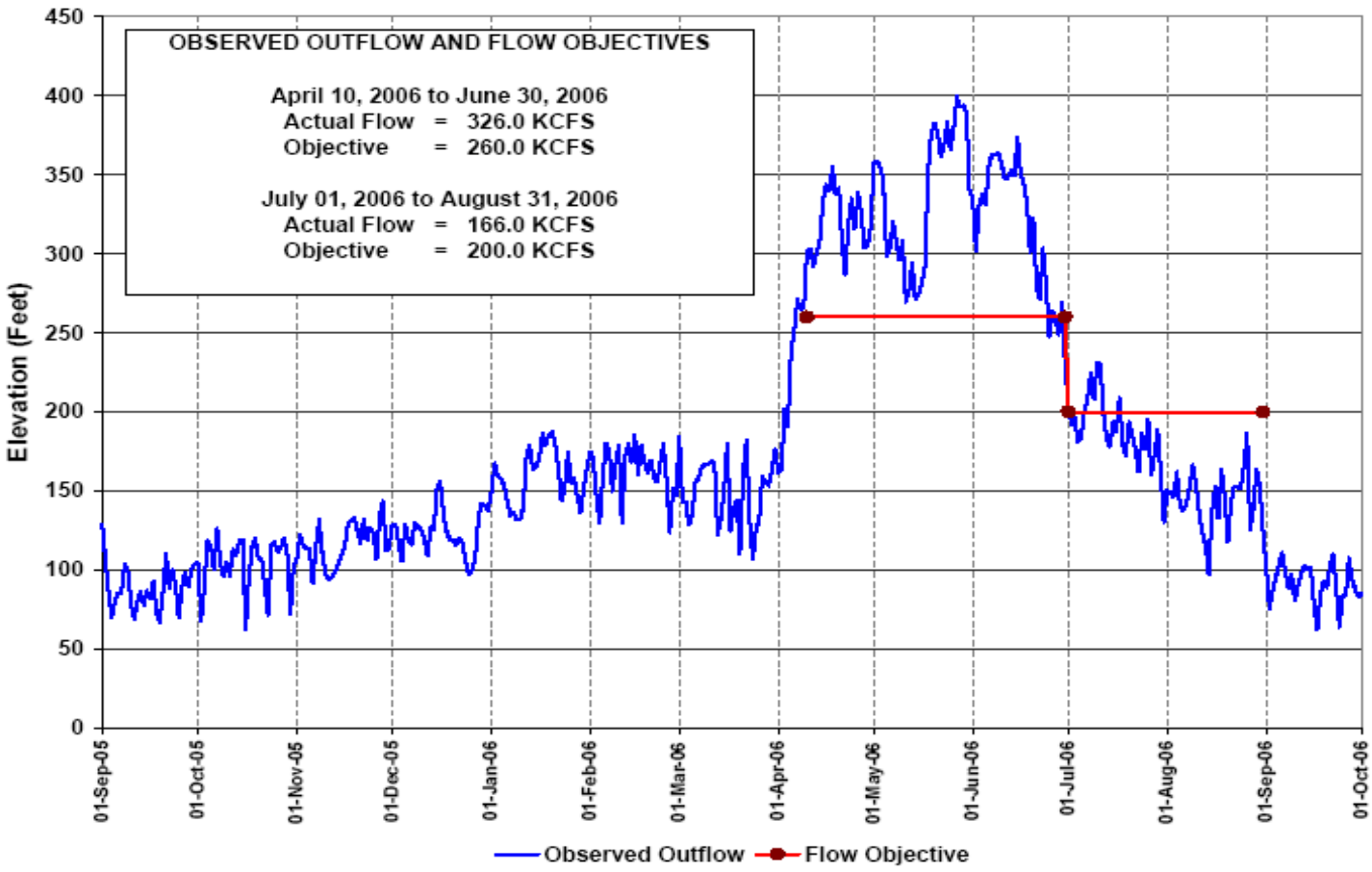
Dec-12-2006 @ 11:45

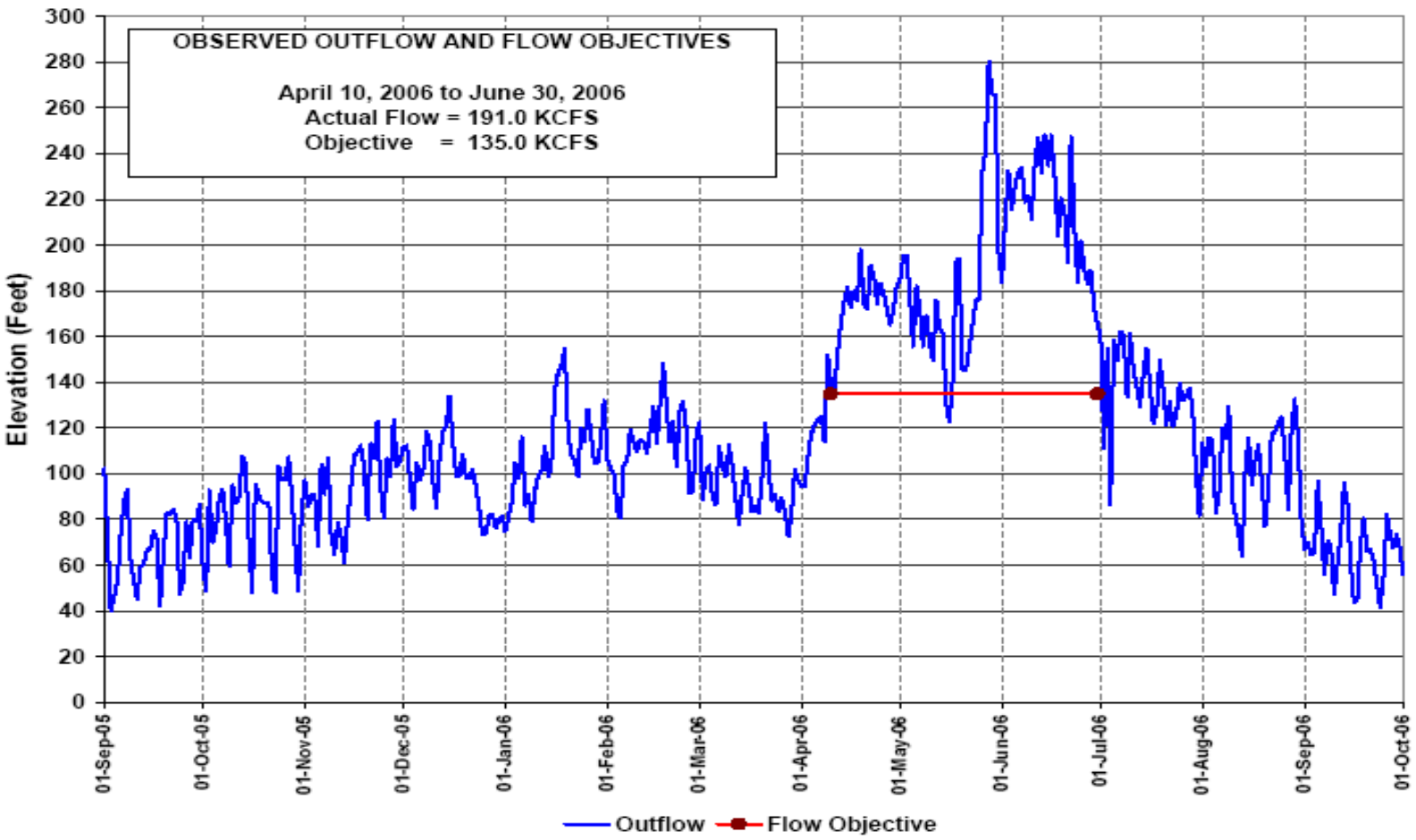
OBSERVED 2003, 2004, 2005 AND 2006 VOLUME RUNOFF IN MILLION ACRE FEET

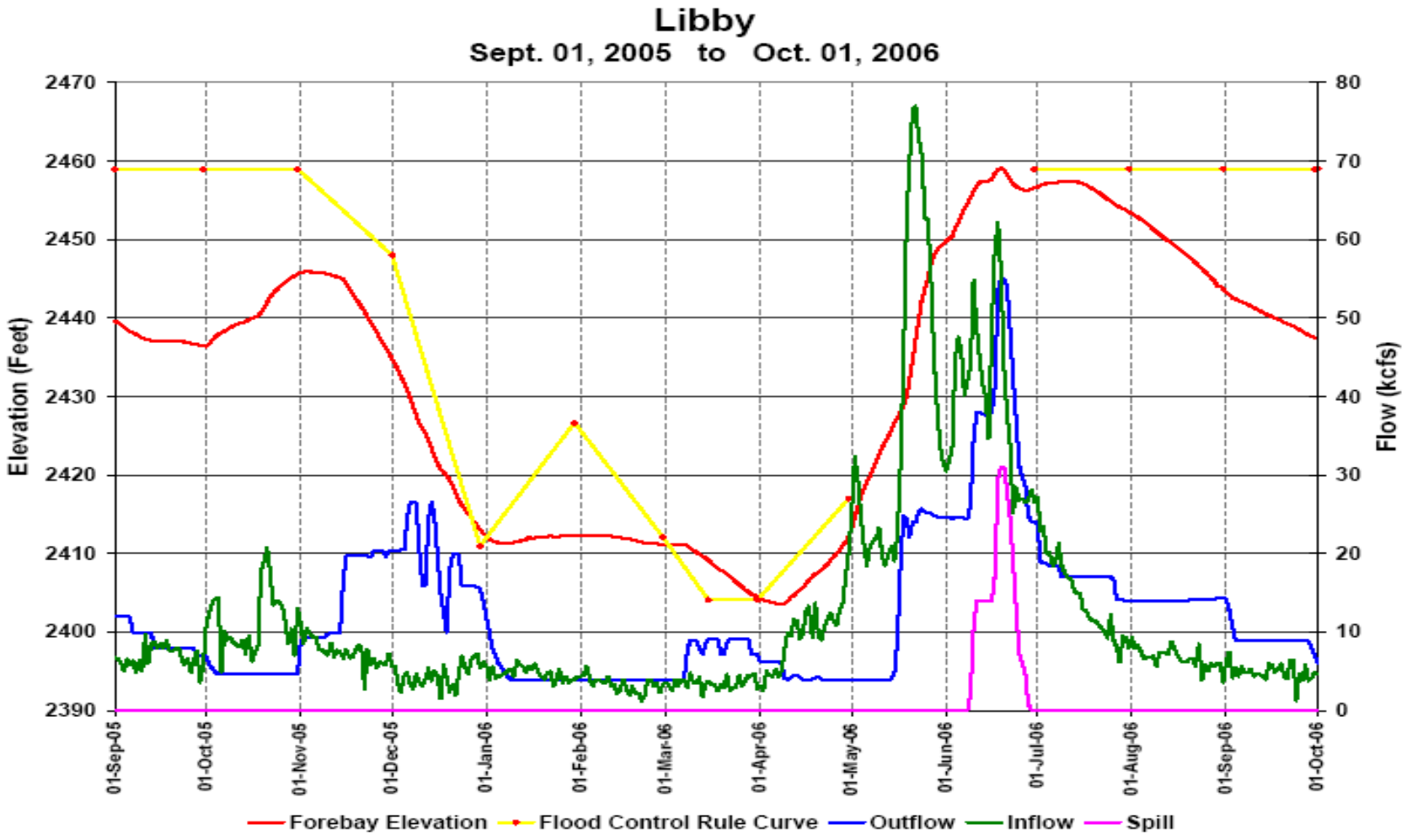
	JAN-JUL 03		JAN-JUL 04		JAN-JUL 05		JAN-JUL 06	
PROJECT	OBS	%	OBS	%	OBS	%	OBS	%
HUNGRY HORSE	1.82	82	1.9	85	1.79	80	2.36	106
LIBBY	5.19	82	4.6	73	5.92	94	6.91	110
ALBENI FALLS	12.00	78	11.6	76	11.9	78	16.24	106
GRAND COULEE	54.18	86	50.3	80	54.4	86	66.89	106
DWORSHAK	3.56	100	3.04	86	2.46	69	3.51	99
LOWER GRANITE	23.81	79	20.7	69	18.1	60	32.2	107
THE DALLES	87.69	82	83	77	81.3	76	114.7	107

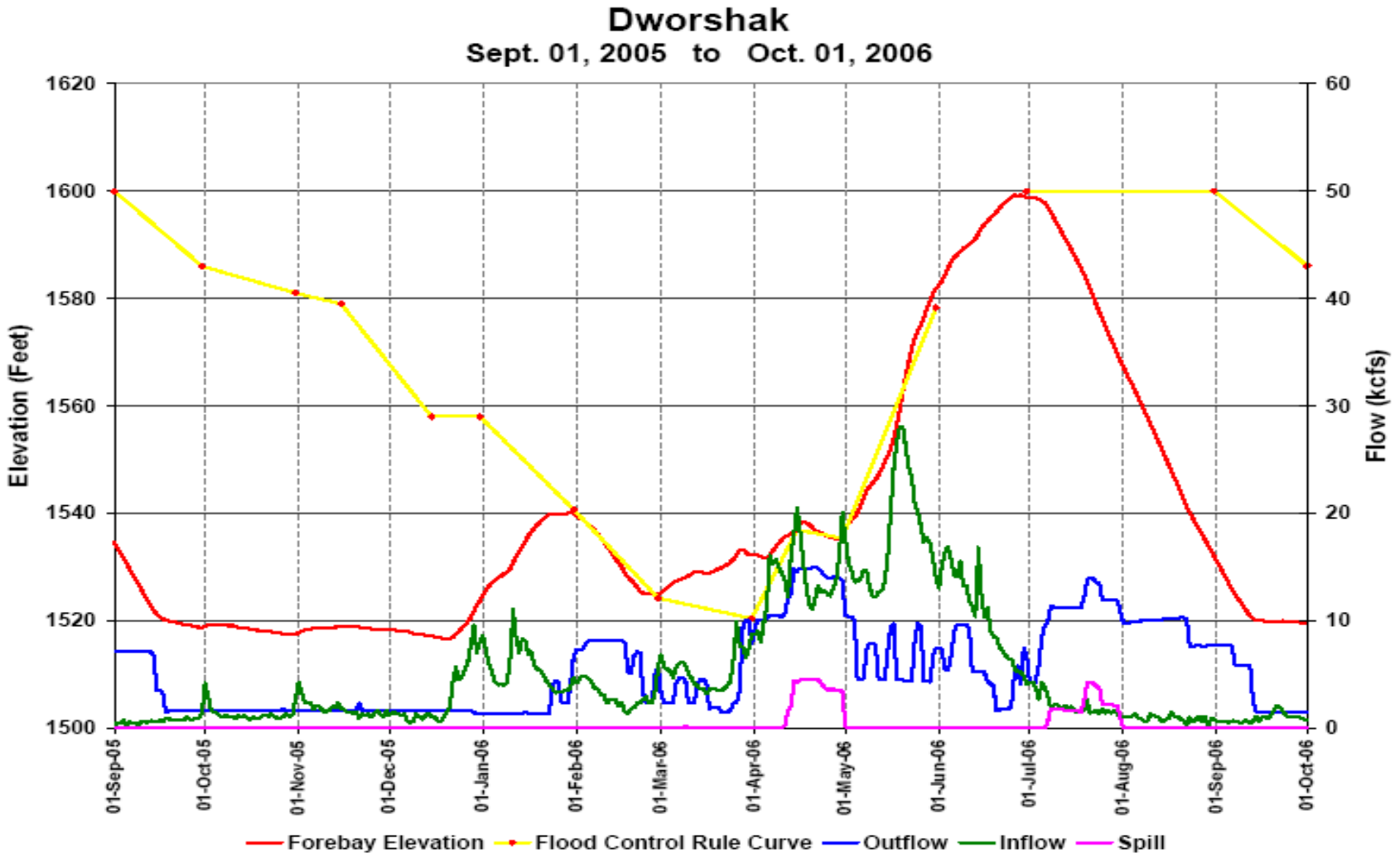
	APR-AUG 03		APR-AUG 04		APR-AUG 05		APR-AUG 06	
PROJECT	OBS	%	OBS	%	OBS	%	OBS	%
HUNGRY HORSE	1.66	80	1.78	86	1.48	71	2.14	104
LIBBY	5.08	81	4.68	75	5.56	89	6.63	106
ALBENI FALLS	10.05	75	10.4	77	9.57	71	13.92	104
GRAND COULEE	50.24	83	49.3	82	48.8	81	61.19	101
DWORSHAK	2.35	66	2.5	91	1.7	62	2.73	100
LOWER GRANITE	17.65	77	16.1	70	14.4	63	25.56	112
THE DALLES	73.77	79	73	78	68.5	74	97.54	105

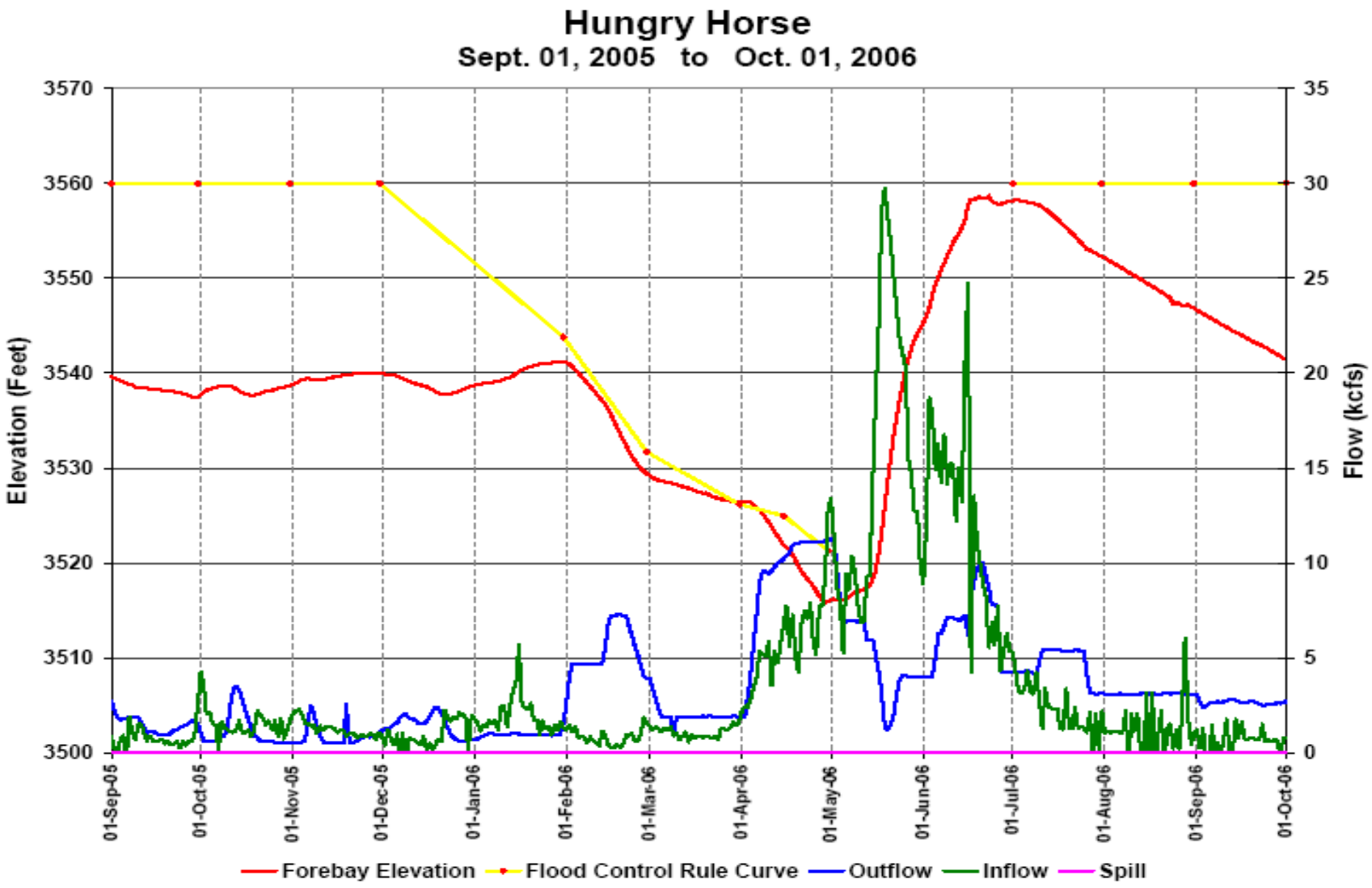

Lower Granite
Sept. 01, 2005 to Oct. 01, 2006
OBSERVED OUTFLOW AND FLOW OBJECTIVES
April 03, 2006 to June 20, 2006
Actual Flow = 125.0 KCFS
Objective = 100.0 KCFS
June 21, 2006 to August 31, 2006
Actual Flow = 38.0 KCFS
Objective = 54.0 KCFS
Elevation (Feet)
220
200
180
160
140
120
100
80
60
40
20
0
01-Sep-05
01-Oct-05
01-Nov-05
01-Dec-05
01-Jan-06
01-Feb-06
01-Mar-06
01-Apr-06
01-May-06
01-Jun-06
01-Jul-06
01-Aug-06
01-Sep-06
01-Oct-06
Observed Outflow
Flow Objective


McNary
Sept. 01, 2005 to Oct. 01, 2006
OBSERVED OUTFLOW AND FLOW OBJECTIVES
April 10, 2006 to June 30, 2006
Actual Flow = 326.0 KCFS
Objective = 260.0 KCFS
July 01, 2006 to August 31, 2006
Actual Flow = 166.0 KCFS
Objective = 200.0 KCFS
Elevation (Feet)
450
400
350
300
250
200
150
100
50
0
01-Sep-05
01-Oct-05
01-Nov-05
01-Dec-05
01-Jan-06
01-Feb-06
01-Mar-06
01-Apr-06
01-May-06
01-Jun-06
01-Jul-06
01-Aug-06
01-Sep-06
01-Oct-06
Observed Outflow
Flow Objective


Priest Rapids
Sept. 01, 2005 to Oct. 01, 2006
OBSERVED OUTFLOW AND FLOW OBJECTIVES
April 10, 2006 to June 30, 2006
Actual Flow = 191.0 KCFS
Objective = 135.0 KCFS
Elevation (Feet)
300
280
260
240
220
200
180
160
140
120
100
80
60
40
20
0
01-Sep-05
01-Oct-05
01-Nov-05
01-Dec-05
01-Jan-06
01-Feb-06
01-Mar-06
01-Apr-06
01-May-06
01-Jun-06
01-Jul-06
01-Aug-06
01-Sep-06
01-Oct-06
Outflow
Flow Objective


Libby
Sept. 01, 2005 to Oct. 01, 2006
Elevation (Feet)
Flow (kcfs)
2470
2460
2450
2440
2430
2420
2410
2400
2390
80
70
60
50
40
30
20
10
0
01-Sep-05
01-Oct-05
01-Nov-05
01-Dec-05
01-Jan-06
01-Feb-06
01-Mar-06
01-Apr-06
01-May-06
01-Jun-06
01-Jul-06
01-Aug-06
01-Sep-06
01-Oct-06
Forebay Elevation
Flood Control Rule Curve
Outflow
Inflow
Spill


Dworshak
Sept. 01, 2005 to Oct. 01, 2006
Elevation (Feet)
Flow (kcfs)
1620
1600
1580
1560
1540
1520
1500
60
50
40
30
20
10
0
01-Sep-05
01-Oct-05
01-Nov-05
01-Dec-05
01-Jan-06
01-Feb-06
01-Mar-06
01-Apr-06
01-May-06
01-Jun-06
01-Jul-06
01-Aug-06
01-Sep-06
01-Oct-06
Forebay Elevation
Flood Control Rule Curve
Outflow
Inflow
Spill


Hungry Horse
Sept. 01, 2005 to Oct. 01, 2006
Elevation (Feet)
Flow (kcfs)
3570
3560
3550
3540
3530
3520
3510
3500
35
30
25
20
15
10
5
0
01-Sep-05
01-Oct-05
01-Nov-05
01-Dec-05
01-Jan-06
01-Feb-06
01-Mar-06
01-Apr-06
01-May-06
01-Jun-06
01-Jul-06
01-Aug-06
01-Sep-06
01-Oct-06
Forebay Elevation
Flood Control Rule Curve
Outflow
Inflow
Spill

December 29,2006

Grand Coulee

Sept. 01, 2005 to Oct. 01, 2006